We Claim:

1. A single sensor actuation system for a driven belt of a tortilla press comprising:

a signal emitting and retrieving sensor producing an emitted signal;

an AC inverter, the sensor connected to the inverter;

at least one detectable element on the belt and sensed by the sensor when said detectable element is aligned with the emitted signal of the sensor; and

a platen for pressing tortillas on the belt, wherein the sensor retrieves a reflected signal from said detectable element and sends a sensor return signal to a motor driving the belt to stop the belt in response to the retrieving when the at least one detectable element is aligned with the emitted signal of the sensor, and wherein the AC inverter sends a signal to an actuator of the platen to bring the platen down to press a tortilla when the belt has stopped.

2. The single sensor system of claim 1, wherein the inverter includes a switch, and the motor has a lead connecting the motor to the inverter so that the switch closes when the motor goes to 0 Hz.

3. The single sensor system of 1, wherein the inverter and an associated Programmable Logic Controller (PLC) receive the sensor return signal from the sensor when a detectable element is detected by the sensor, and

wherein the inverter stops the motor through a pre-programmed vector curve that is provided as an integral part of the inverter so that the belt moves a set distance past the point at which the retrieved signal was received by the inverter so that the belt travel after a retrieved stop signal is the same independent of the belt's original speed.

4. The single sensor system of Claim 3, wherein consistency of a stopping distance enables a reduction in belt length of more than six percent.

5. The single sensor system of Claim 3, wherein consistency of a stopping distance enables a reduction of approximately two tenths of a second per stroke of the platen.

6. The single sensor system of Claim 3 wherein the sensor return signal received by the PLC satisfies a condition in a ladder logic of the PLC and prepares the ladder logic program to receive a subsequent condition of the motor going to zero hertz.

7. The single sensor system of Claim 6 wherein the inverter detects zero hertz in the motor and automatically sends a drive stop signal via a wire to the PLC, the drive stop signal is received by said PLC and satisfies another condition of the ladder logic, and wherein the ladder logic effectuates a command to bring the platen down.

8. The single sensor system of claim 7 wherein the ladder logic effectuates a command to bring the platen back up after a predetermined length of time.

9. The single sensor system of claim 8 wherein the ladder logic automatically sends a signal to the inverter to restart the drive with minimal loss of time and space on the belt.

10. The single sensor system of Claim 1, wherein the belt is a flexible belt surrounding at least one roller, and wherein the sensor is positioned juxtaposed to said at least one roller.

11. The single sensor system of Claim 1, wherein the sensor is a fiber optic light sensor with capabilities of sensing multiple shades of color from the detectable element, and wherein the detectable element is a colored mark of a predetermined range of shades and color on the belt.

12. The single sensor system of Claim 1, wherein the sensor is directly connected to a terminal block in the AC inverter and sends a sensor return signal to the motor to stop the belt in response to said retrieving when the at least one detectable element is aligned with the emitted signal of the sensor.

13. A method of actuating a second part of a tortilla machine in response to a detected position of a first part of the machine, comprising:

detecting a first position of said first part the machine by a sensor;

sending a signal from the sensor to an AC inverter when the first position is detected by the sensor;

slowing the first part of the machine by a signal from the inverter to a drive of the first part;

stopping the first part of the machine at a predetermined second position different from the first position; and

actuating the second part of the machine when a signal from the drive of the first part of the machine goes to a zero frequency.

14. The method of Claim 13, wherein the inverter has a switch that is normally open when connected to a non-zero frequency signal from the drive, said method further comprising:

maintaining said switch open by sending said signal from said drive to said switch; and

said actuating being initiated by closing said switch when said signal goes to zero frequency when the drive is stopped.

15. The method of Claim 13, wherein the first part has a detectable element and the machine has a sensor for detecting the detectable element, the method further comprising:

detecting the position of the first part by sensing the detectable element on the first part by the sensor, and

retrieving a returned signal from the detectable element and sending said returned signal to the inverter.

16. The method of Claim 15, wherein said detectable element is a colored mark on said first part, said sensor is a fiber optic sensor, and the steps of detecting and retrieving further comprise:

sending a beam from the sensor to strike the detectable element when the detectable element is aligned with the beam; and

retrieving a reflected beam from the detectable element by the sensor and sending an electrical signal converted from the reflected beam to the inverter.

17. The method of Claim 16, further comprising the preliminary step of teaching the sensor the color of the detectable element so that it is sensitive to the shades of the color that will be present during use.

18. The method of Claim 15, wherein the tortilla press further comprises a Programmable Logic Controller (PLC), the method further comprising:

sending said return signal to said PLC; and

stopping the first part by way of a said return signal that was sent to said inverter.

19 The method of Claim 18, said stopping further comprising stopping said drive of the belt through a pre-programmed vector curve that is provided as an integral part of the inverter so that the belt moves a set distance past a point at which the retrieved signal was received by the inverter so that the belt travel after a retrieved stop signal is the same independent of the belt's original speed.

20. The method of Claim 19, further comprising reducing the necessary length of the belt by more than six percent by increasing the consistency of a stopping distance by said single sensor and said pre-programmed vector curve.

21. The method of Claim 19, further comprising reducing a cycle time by approximately two tenths of a second by increasing the consistency of a stopping distance by said single sensor and said pre-programmed vector curve.

22. The method of Claim 18, further comprising:

coordinating movement of the first part of the tortilla press with movement of the second part of the tortilla press by way of the PLC;

satisfying at least one condition of ladder logic in the PLC by receiving the sensor return signal in the PLC;

detecting zero hertz in the belt drive by the inverter and automatically sending a drive stop signal to the PLC;

satisfying at least another condition of the ladder logic in the PLC by receiving the drive stop signal in the PLC; and

effectuating a command by the ladder logic to bring the platen down.

23 The method of Claim 22, further comprising effectuating a command by ladder logic to bring the platen back up after a predetermined length of time.

24. The method of Claim 23, further comprising automatically sending a restart signal by ladder logic control to the inverter to restart the belt drive with minimal loss of time and space on the belt.